



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,395	06/29/2007	Robert Gilmour JR.	19603/4612	8378
26774 7590 04/27/2009 NIXON PEABODY LLP - PATENT GROUP 1100 CLINTON SQUARE ROCHESTER, NY 14604				
EXAMINER				
PORTER, JR. GARY A				
ART UNIT		PAPER NUMBER		
3766				
MAIL DATE		DELIVERY MODE		
04/27/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,395

Applicant(s)

GILMOUR ET AL.

Examiner

GARY A. PORTER, JR

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-38 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-10, drawn to inducing ventricular fibrillation in order to identify physiological conditions which affect ventricular fibrillation recovery.

Group II, claim(s) 11-20, drawn to identifying treatment candidates that prevent ventricular fibrillation from being induced.

Group III, claim(s) 21-30, drawn to identifying treatment candidates that modulate ventricular fibrillation.

Group IV, claim(s) 31, drawn to determining the correlation of a sequence of rest intervals to ones that are predicted to cause ventricular fibrillation.

Group V, claim(s) 32-38, drawn to identifying treatment candidates which prevent ventricular tachycardia from becoming ventricular fibrillation.

2. The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The common technical feature of Groups I-V, i.e. providing treatment candidates and stimulating the heart prematurely to induce ventricular fibrillation is known in the art, as evidenced by Burnes et al. (US Pub. 2004/0220640) in paragraph [0009]. Therefore there is not a single inventive concept that links Groups I-V together. The special technical feature of Group I, i.e. inducing ventricular fibrillation in order to identify physiological conditions which affect ventricular fibrillation recovery, is not shared by Groups II-V. The special technical feature of Group II, i.e. identifying treatment candidates that prevent ventricular fibrillation from being induced, is not shared by Groups I and III-V. The special technical feature of Group III, i.e. identifying treatment candidates that modulate ventricular fibrillation, is not shared by Groups I, II, IV, or V. The special technical feature of Group IV, i.e. determining the correlation of a sequence of rest intervals to ones that are predicted to cause ventricular fibrillation, is not shared by Groups I-III and V. The special technical feature of Group V, i.e. identifying treatment candidates which prevent ventricular tachycardia from becoming ventricular fibrillation, is not shared by Groups I-IV.

3. IN ADDITION TO THE RESTRICTION ABOVE SPECIES MUST BE CHOSEN BELOW:

4. If Group I is chosen above, this application contains claims directed to the following patentably distinct species of the claimed invention:

Species I, the embodiment wherein the physiological condition tested is velocity Restitution and the physiological condition altered is velocity recovery (Claims 2 and 6)

Species II, the embodiment wherein the physiological condition tested is action potential duration restitution and the physiological condition altered is action potential duration (Claims 3 and 7)

Species III, the embodiment wherein the physiological condition tested is cardiac memory and the physiological condition altered is cardiac memory (Claims 4 and 8)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claims 1, 5, 9 and 10 are generic.

5. If Group II is chosen above, this application contains claims directed to the following patentably distinct species of the claimed invention:

Species A, the embodiment wherein the treatment candidate is a pharmaceutical compound (Claims 12 and 13)

Species B, the embodiment wherein the treatment candidate is one or more electrical impulses (Claim 14)

6. Furthermore, if Group II is chosen above and after Species A or B has been selected, this application contains claims directed to the following patentably distinct sub-species of the claimed invention:

Sub-species i, the embodiment wherein identifying treatment candidates is based off of velocity restitution (Claim 15)

Sub-Species ii, the embodiment wherein identifying treatment candidates is based off of action potential duration (Claim 16)

Sub-species iii, the embodiment wherein identifying treatment candidates is based off of cardiac memory (Claim 17)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species and sub-species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claims 11, 18, 19 and 20 are generic.

7. If Group III is chosen above, this application contains claims directed to the following patentably distinct species of the claimed invention:

Species I, the embodiment wherein the treatment candidate is a pharmaceutical compound (Claims 22 and 23)

Species II, the embodiment wherein the treatment candidate is one or more electrical impulses (Claim 24)

8. Furthermore, if Group III is chosen above and after Species I or II has been selected, this application contains claims directed to the following patentably distinct sub-species of the claimed invention:

Sub-species a, the embodiment wherein identifying treatment candidates is based off of velocity restitution (Claim 25)

Sub-Species b, the embodiment wherein identifying treatment candidates is based off of action potential duration (Claim 26)

Sub-species c, the embodiment wherein identifying treatment candidates is based off of cardiac memory (Claim 27)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species and sub-species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claims 21, 28, 29 and 30 are generic.

9. If Group V is chosen above, this application contains claims directed to the following patentably distinct species of the claimed invention:

Species 1, the embodiment wherein the treatment candidate is a pharmaceutical compound (Claims 33 and 34)

Species 2, the embodiment wherein the treatment candidate is one or more electrical impulses (Claim 35)

10. Furthermore, if Group V is chosen above and after Species 1 or 2 has been selected, this application contains claims directed to the following patentably distinct sub-species of the claimed invention:

Sub-species A, the embodiment wherein identifying treatment candidates is based off of velocity restitution (Claim 36)

Sub-Species B, the embodiment wherein identifying treatment candidates is based off of action potential duration (Claim 37)

Sub-species C, the embodiment wherein identifying treatment candidates is based off of cardiac memory (Claim 38)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species and sub-species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claim 32 is generic.

11. The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or

employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species**, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the

prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GARY A. PORTER, JR whose telephone number is (571)270-5419. The examiner can normally be reached on Monday - Thursday, 8AM - 5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571)272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. A. P./
Examiner, Art Unit 3766

/Carl H. Layno/
Supervisory Patent Examiner, Art
Unit 3766